

Cell Based Data Processing

ABSTRACT OF THE DISCLOSURE

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A data processing program is specified using a specification having a number of cell specifications specifying a number of data processing cells, with each data processing cell having a formula specifying an action or a computation. A cell may have one or more attributes referencing other cells. A cell formula may reference a value of another cell or be executed conditionally. In one embodiment, one of the cell is reserved as an output cell specifying the output, and a mnemonic is reserved for providing input to the specified data processing. An execution analyzer is provided to analyze the data processing specification, and identify the execution order of the cells. Further, an execution engine is provided to effectuate the specified data processing by executing the specified actions/computations of the cells in accordance with the determined execution order.

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